

Addresses: Harold F. Greeney, Yanayacu Biological Station & Center for Creative Studies, c/o Foch 721 y Amazonas, Quito, Ecuador, e-mail: revmmoss@yahoo.com. Mery E. Juiña J., Pontificia Universidad Católica del Ecuador, Av. 12 de Octubre 1076 y Roca, Quito, Ecuador.

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New record of Cinnamon Teal *Anas cyanoptera* in Ecuador

by Carlos Camacho & Robert E. Wilson

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Cinnamon Teal *Anas cyanoptera* is widespread throughout much of the Western Hemisphere, with five subspecies (*A. c. borreoi*, *A. c. cyanoptera*, *A. c. orinouus*, *A. c. septentrionalium* and *A. c. tropica*) currently recognised (Snyder & Lumsden 1951, Wilson *et al.* 2010). *A. c. septentrionalium* breeds in western North America and is a common winter visitor to the southern USA and Central America, with small numbers reaching northern South America. South American populations are mainly sedentary or exhibit only small-scale dispersal (Phillips 1923). *A. c. borreoi* is endemic to the east Colombian Andes, whereas the adjacent lowlands are occupied by *A. c. tropica*. Further, *A. c. orinouus* occurs in the highlands of Argentina, Bolivia, Chile and Peru. The most widespread South American subspecies, *A. c. cyanoptera*, occurs throughout the lowlands of Peru to Chile, Uruguay and Argentina, and occasionally wanders to the central high Andes, where it may be found with *A. c. orinouus* (Evarts 2005).

Cinnamon Teal has historically been scarce in the Ecuadorian high Andes and inter-Andean valley, with records of both *A. c. borreoi* and *A. c. septentrionalium* in northern Ecuador. The last record was of a pair of *A. c. septentrionalium* on Laguna de San Pablo, prov. Imbabura, 50 km north of Quito, in 1938 (Ridgely & Greenfield 2001); it was subsequently considered extirpated in Ecuador (Granizo *et al.* 2002). The cause of its disappearance is uncertain (Ridgely & Greenfield 2006) but wetland disturbance seems most likely (MAE *et al.* 2000).

There have been very few recent observations of Cinnamon Teal in Ecuador (Fig. 1). There are two reports, of a male and a pair, at Punta Moreno, Isabela Island, Galápagos, in October and November 2004 (Kostecke & Kostecke 2006), the first records for the archipelago. The species has been reported twice in southern Ecuador: one on Laguna de Llaviuco, Cajas National Park, prov. Azuay (King 1989), for which supporting evidence is lacking, and one at Santa Rosa marshes, prov. El Oro, on 1 June 2003 (R. Ahlman pers. comm.). These reports probably involved vagrant *A. c. cyanoptera* as this subspecies is



Figure 1. Map of Ecuador showing the locations of Cinnamon Teal *Anas cyanoptera* reports mentioned in the text.

widespread in coastal Peru (Schulenberg & Parker 1981, Wilson *et al.* 2010), although in neither case was subspecific identification attempted.

On 11 March 2009, three male Cinnamon Teals were hunted at San Eloy, prov. Manabí (00°54'S, 80°27'W; 330 m) with 40 Blue-winged Teals *Anas discors*. They were shot in a flooded rice field. One of the Blue-winged Teals was banded with a metal ring from Ontario, Canada. Despite the hunters' knowledge of local waterfowl, they were unable to identify the Cinnamon Teals. According to local people, Cinnamon Teal has not been seen in San Eloy for >20 years. All three birds were of similar size and plumage (Fig. 2). The hunters did not allow us to retain any of the birds for further examination. Therefore precise measurements are not available to aid in subspecies identification.

Discussion

General plumage and body size of examined specimens and differences in distribution, abundance and migratory behaviour among subspecies of *A. cyanoptera* suggest that the new record probably involved *A. c. septentrionalium*. The Colombian subspecies (*A. c. borreroi* and *A. c. tropica*) typically possess more spotting than the three specimens examined, and *A. c. borreroi* is dark chestnut-brown (Snyder & Lumsden 1951). In addition, both Colombian subspecies have a restricted range and have been listed as threatened, with <250 individuals remaining for *A. c. borreroi* (Wetlands International 2002). Consequently, the likelihood that the birds belonged to one of the Colombian subspecies is low.

Ridgely & Greenfield (2001) postulated that the high-altitude *A. c. orinomus* could wander from Peru to lowland Ecuador. However, the northern limit of *A. c. orinomus* is dpto. Junín central Peru (Blake 1977, Everts 2005, Wilson *et al.* 2010) making it unlikely that a vagrant *A. c. orinomus* would wander to central Ecuador. Furthermore, *A. c. orinomus* is the largest subspecies and is easily separated from other subspecies solely on overall body size (Wilson *et al.* 2010). The small size of the San Eloy birds suggests that the most likely candidate subspecies are either *A. c. cyanoptera* or *A. c. septentrionalium*. These two are extremely difficult to differentiate using plumage (Wilson *et al.* 2008); only bill length can be used to distinguish them (Wilson *et al.* 2010). Although Blake (1977) considered that *A. c. cyanoptera* can have spots on the breast, flanks and belly, which are lacking in *A. c. septentrionalium*, of 18 specimens recently collected on the Peruvian coast and held at the University of Alaska Museum (Fairbanks, USA) only 72% have spots on the breast, flanks or rump (REW unpubl.).

Therefore plumage is not a reliable character, as the degree and location of spotting is variable.

The location (San Eloy), which is not part of the typical breeding range of *A. c. cyanoptera*, and the time of year (March) suggest these individuals were



Figure 2. One of the three male Cinnamon Teals *Anas cyanoptera* shot at San Eloy, prov. Manabí, 5 March 2009 (Carlos Camacho)

A. c. septentrionalium rather than vagrants from the Peruvian coast. *A. c. septentrionalium* is a fairly frequent migrant to northern South America, albeit in small numbers, and has historically been recorded as far south as northern Ecuador (Ridgely & Greenfield 2006). Furthermore, *A. c. septentrionalium* commonly forms wintering flocks with Blue-winged Teal. That one of the Blue-winged Teals had been banded in Canada suggests the flock came from North America. Although we cannot confirm the subspecies involved, we feel this indirect evidence points to *A. c. septentrionalium*.

This is a significant record, regardless of the subspecies involved, as it is one of only three reports in the last 72 years. Given the threatened status of Cinnamon Teal in Ecuador (Freile & Rodas 2008), this observation increases our current knowledge of its distribution and migration, although long-term monitoring is required to determine if a potential range expansion from the south or if wintering birds from North America are returning to historical wintering sites is the cause. The report also provides further evidence of the importance of documenting plumage characteristics (e.g., presence of spots and overall coloration) and measurements in this species (especially bill length from the posterior edge of the nares to the nail, and wing chord; Wilson *et al.* 2010) to accurately identify birds to subspecies and potentially determine their provenance.

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Addresses: Carlos Camacho, Aves & Conservación (BirdLife Ecuador), Joaquín Tinajero E3-E5 y Jorge Drom, Quito, Ecuador, e-mail: ccamacho@avesconservacion.org. Robert E. Wilson, Department of Biology and Wildlife, University of Alaska Fairbanks, Fairbanks, Alaska 99775, USA, e-mail: rewilson@alaska.edu